

In the Claims:

1. (Currently Amended) ~~Electromigration~~ An electromigration test apparatus having:

a direct-current source;

an AC voltage source;

a circuit having at least one conductive structure to be tested, which is electrically coupled to the direct-current source and the AC voltage source; and

a measuring device, which is set up in such a way that the measuring device it detects an electrical parameter which is indicative of electromigration in the conductive structure to be tested;

the direct-current source being set up to expose the conductive structure to conditions which accelerate electromigration;

the AC voltage source being set up in such a way that the AC voltage source it exposes the conductive structure to be tested to an alternating current, independently of a direct current of the direct-current source and thus heats the conductive structure to be tested to a predetermined temperature that can be set.

2. (Currently Amended) The apparatus according to Claim 1, the electrical parameter being a resistance of the conductive structure to be tested.

3. (Currently Amended) The apparatus according to Claim 1 ~~or~~ 2, which furthermore has an evaluation unit for determining an electrical power, the evaluation unit having a voltage measuring device and a current measuring device which are implemented in the circuit in such a way that, by means thereof, a root-mean-square current through the conductive structure to be tested and a root-mean-square voltage across the conductive structure to be tested can be detected.

4. (Currently Amended) The apparatus ~~Apparatus~~ according to Claim 1 ~~to~~ 3, a control device being provided, which is set up in such a way

that the control device controls the AC voltage source in such a way that the temperature of the conductive structure to be tested can be kept constant.

5. (Currently Amended) The apparatus according to Claim 1, the conductive structure to be tested being arranged on or in a semiconductor wafer.

6. (Currently Amended) The apparatus according to Claim 1 ~~to 5~~, the alternating-current source and the direct-current source being integrated in a pulse generator.

7. (Currently Amended) The apparatus according to Claim 1 ~~to 6~~, which furthermore has a heating furnace set up in such a way that it ~~is~~ the heating furnace heats the conductive structure to be tested.

8. (Currently Amended) A Method for testing a conductive structure for electromigration, having the following steps:

electrically coupling a conductive structure to be tested to an electrical circuit electrically coupled to a direct-current source and an alternating-current source;

supplying ~~of~~ the conductive structure to be tested with a direct current which causes the electromigration within the conductive structure to be tested;

heating ~~of~~ the conductive structure to be tested ~~_by means of the alternating current~~ to a predetermined temperature which can be set, the alternating current being independent of a direct current, ~~which~~ the direct current ~~brings-bringing~~ about the electromigration within the conductive structure to be tested; and

~~detection of~~detecting- an electrical parameter which is indicative of the electromigration within the conductive structure to be tested.

9. (Currently Amended) The method ~~Method~~ according to Claim 8, a resistance of the conductive structure to be tested being detected as the electrical parameter.

10. (Currently Amended) The method ~~Method~~ according to Claim 8, in which, as further steps, a root-mean-square current in the conductive structure to be tested and a root-mean-square voltage across the conductive structure to be tested are detected and an electrical power is determined therefrom.

11. (Currently Amended) The method ~~Method~~ according to Claim 8, the temperature of the conductive structure to be tested being regulated to a constant value by means of the an ~~an~~ evaluation unit.

12. (Currently Amended) The method ~~Method~~ according to Claim 8 ~~to 11~~, the conductive structure to be tested being formed on or in a semiconductor wafer.